

Quaternary Palaeoecology

H. J. B. Birks and Hilary H. Birks

A study of the methods and approaches by which past Quaternary environments can be reconstructed from the fossil and sedimentary record. Quaternary palaeoecology – the most recent geological period – was a time of rapid evolutionary and ecological change, culminating in the present pattern and diversity of ecosystems. It has proved possible not only to relate these changes to the fluctuating climate but also to infer what man's early influence may have been.

New and recently published material from all over the world has been collated and coordinated by the authors and there are extensive bibliographies at the end of each chapter. Emphasis is given to quantification and numerical methods in palaeoecology. As pollen analysis is the backbone of Quaternary palaeoecology this is described in detail, but it is hoped that the reader will appreciate the value of studying sediments and a variety of fossil types in any palaeoecological study.

Contents

Preface. Ecology and palaeoecology. Principles of palaeoecology. Sampling and description of organic sediments. Organic sediments in palaeoecology. Plant macrofossils. Palaeolimnology. Molluscs, insects, and vertebrates in Quaternary Palaeoecology. Principles and methods of pollen analysis. Pollen production, dispersal, deposition and preservation. The reconstruction of past floras and past plant populations. The reconstruction of past plant communities. The reconstruction of past environments. Index.

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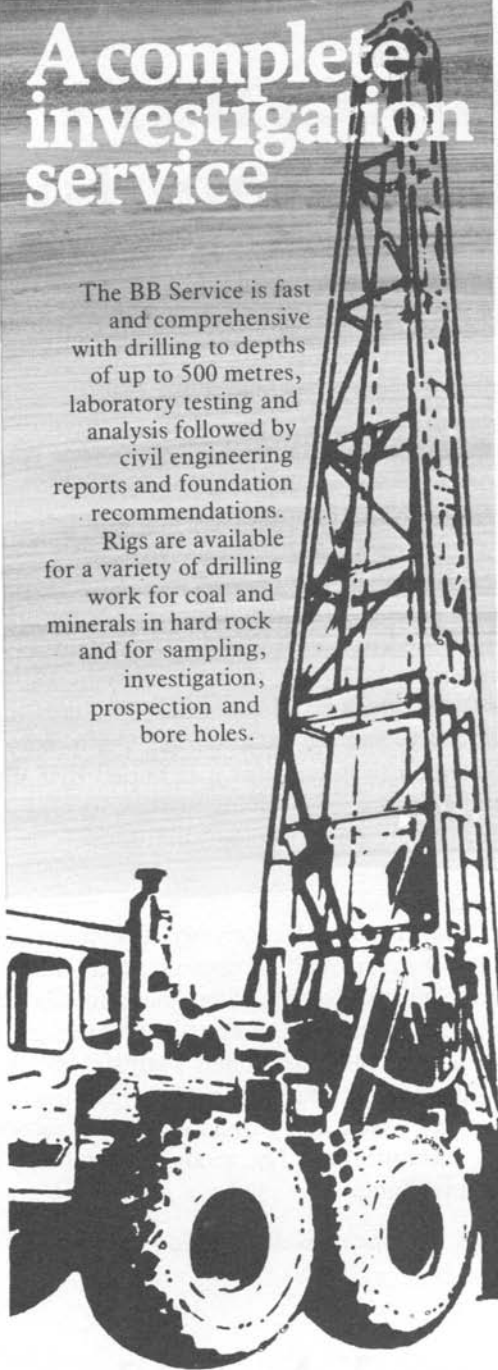
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Geological Magazine

Volume 117, Number 3, May 1980

CALLOMON, J. H. & BIRKELUND, T. The Jurassic transgression and the mid-late Jurassic succession in Milne Land, central East Greenland	211-226
LORD, A. R. Weichselian (Late Quaternary) ostracods from the Sandnes Clay, Norway	227-242
DERBYSHIRE, E. & JONES, P. F. Systematic fissuring of a matrix-dominated lodgement till at Church Wilne, Derbyshire, England	243-254
FREST, T. J. & STRIMPLE, H. L. New diminutive camerate crinoids from the Ludlow of Oklahoma	255-266
TANNER, P. W. G. & MILLER, R. G. Geochemical evidence for loss of Na and K from Moinian calc-silicate pods during prograde metamorphism	267-275
KIRK, N. H. Controlling factors in the evolution of the graptolites	277-284
VILADKAR, S. G. The fenitized aureole of the Newania carbonatite, Rajasthan	285-292
WILLIAMS, D. J. & JOHNSON, W. A note on the formation of fulgurites	293-296
REVIEWS	297-307
PUBLICATIONS RECEIVED	309-310

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